## Meeting Minutes Transmittal/Approval Unit Managers' Meeting 200 Area Groundwater and Source Operable Units 1200 Jadwin Avenue, Richland, Washington April 18, 2007

APPROVAL:

Date: 5-7-09

Larry Romine, 200 Area Unit Manager, DOE/RL

APPROVAL:

Arlene Tortoso, 200 Area Assistant Manager, DOE/RL

APPROVAL:

Graig Camerón, 200 Area Unit Manager, EPA

APPROVAL:

John Price, 200 Area Unit Manager, Ecology

Date: 5/22/2005



**EDMC** 

Minutes of the 200 Area Unit Managers' Meeting of April 18, 2007 are attached. Minutes are comprised of the following:

Attachment 1	Agenda
Attachment 2	Attendance Record
Attachment 3	Agreements and Issues List
Attachment 4	Action Item List
Attachment 5 Status	Operable Units and Facilities
Attachment 6	200-UP-1 Rebound Study, Technetium-99
Attachment 7	200-UP-1 Rebound Study, Uranium
Attachment 8	Tc-99 concentrations in extraction wells 299-W15-44 and 299-W15-765
Attachment 9	Tc-99 concentrations in monitoring well 299-W15-763
Attachment 10	Photo – Purolite resin treatment skids
Attachment 11	Photo – Purolite resin treatment skids
Attachment 12	Trend data for carbon tetrachloride in well 299-W15-6
Attachment 13	Tc-99 concentrations in 241-T Monitoring Wells
Attachment 14	Tc-99 at 241-T Tank Farms
Attachment 15	Tc-99 concentrations in wells in the vicinity of the T Tank Farm
Attachment 16	Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites, FY 2003 – FY 2007
Attachment 17	Locations of Proposed Wells Associated with 200-BP-5 Operable Unit

Attachment 18 Surface Geophysical Exploration Investigation Area

Attachment 19 Well Reporting Significant Increases in Tc-99 in

August

Attachment 20 Attachment 3B, 200-PO-1 Operable Unit Groundwater Well Decommissioning List, Supplement to DOE/RL-2004-18.

## 200 AREA UNIT MANAGERS' MEETING DRAFT AGENDA

1200 Jadwin/Rm 1-C-1 April 18, 2007 8:30 – 10:15 AM

#### **GROUNDWATER AND SOURCE OPERABLE UNITS**

- · Status Review of OUs
- Outstanding Action Items/Issues

#### 200-UW-1, 200-CW-3 AND FACILITIES

- Status Review
- Outstanding Action Items/Issues

#### 200 Area Unit Managers Status Meeting April 18, 2007

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Frank Roldy	POE	My Jodesmin	372-0945
Greg Thomas	FH	B1-5	373-3907
Richoldfram	RH.	Central Alte	2-2426
Colen Triner	FH	600 VP1 VW-1	3-3176
GLORIA CUMMINS	FH	Po-1	2-2484
AN/ Rogers	FH	MW-1	376-13/5
Attene Cortoso	DOG	200 Area GW/Source	373-9631
John Price	Eco (og y	TPA Proj Mys	372-792/
Virginia Rohay	FH 1/	PW-1	373-3803
Zelma Jackson	ECY	200 MRa	372-7910
Kon Brunke	FH	200 Mara CW-1 CS-1	376-2667
Craig Cameron	EPA		376-8665
Pan Ankrun	FGR.	LW-1, UR-) MG-1, etc	373-7222
Larry Fitch	FEBRH	1. 7 //	376-7536
Ann Shettuck	FH	MW-17 PW-1	376-8156
JOHN MORSE	005-R(	OUENS (61FT	376 -0057
Carry Romme	DOE-72C	Zeo A	376-4747
Rick Bond	Ecology	221-U	372-7885
	* /		

#### 200 Area Unit Managers Status Meeting April 18, 2007

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Kevin Leary	DOE-RL	UP-1 200-UW-1	373-7285
John Winterhalder	FH	Enc	572-8194
Sonya Moore	FH THA	TPA	372-3320
Shour aimo	N ODOE	:	(59)
Stuart Luttrell	PNNL	G Water How	376-6023
MarkByrnes	FH	ZP-104	373-3996
Thomas L. Watson	Fluor	Mgr 200E	376-5450
Byan Foley	DOTE	200 An	376-7567
Brian Charboneou	DOE		393-6139
RAK Hebrense	POE-RL	200 BPS	373 9626
Rad Wbos	EPA		376-3749
20B 81188	FM		773-3285
Made Wooday	_DOSRL		372-2889
Julie Robertson	FA	U Canyon	376-8162
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#### Issue Resolution Meeting Agreements and Issues List April 18, 2007 200 Area Unit Managers' Meeting

Agreement: Re-start the 200-UP-1 Pump and Treat. Once the T Area wells come on line, the 200-UP-1 Pump and Treat flow rates will be reduced, as needed, to accommodate the increased flow from the new wells.

Agreement: Attachment 3B, supplement to DOE/RL-2004-18 200- PO-1 Waste Control Plan, is approved.

# Attachment 4

### 200 Area Unit Managers' Meeting OPEN ACTION ITEMS & TRACKING

Action#	Action/Subject	Assigned To	Owed To	Assigned Date	Original Due Date	Adjusted Due Date	Date Complete	Status
78	Present IS-1 DQO briefing to HAB. RL to request time slot on HAB River & Plateau Committee for this briefing.	DOE-K. Leary	All	8/23/06	9/21/06	TBD		Original due date could not be met. Due date TBD per K. Leary.
80	Send report from Remedial Action Decision Making panel (Tom Fogwell)	FH-M. Byrnes	ECY/EPA Price/Goswami/C ameron	10/18/06	11/16/06	5/30/07		Panel requested more time to complete their report.
81	Prepare a short overview of the BP-5 Work Plan for Ecology Tank Farms personnel (Include Rod Lobos-EPA).	FH-G. Thomas	J. Lyons/D. Goswami/ J. Caggiano	3/15/07	4/18/07	4/30/07		John Price to provide names to Greg Thomas.
82	Provide a schedule for the construction of the ETF connections for T-Area wells	FH-M. Byrnes	D. Faulk	3/15/07	4/18/07		4/18/07	Completed - Mark Byrnes distributed the schedule.
83	Resolve the wording required to use single-walled piping for the T-Area wells	FH-M. Byrnes	J. Stults	3/15/07	3/27/07	4/30/07		
84	Provide an overview of the correlation of soil characterization data to HRR for BC Cribs.	FH-M. Benecke	J. Stults	3/15/07	3/27/07	4/30/07		
85	Provide a critical path schedule and confirm well locations	FH-Byrnes	Charboneau/ Jackson	4/18/07	4/24/07			
86	Report on the regeneration option for Purolite resin	FH-Byrnes	Charboneau	4/18/07	4/18/07			
87	Set up a meeting to discuss how we can address the tribal scenario.	FH-Bymes	Charboneau	4/18/07	5/17/07			

## 200 AREA UNIT MANAGERS' MEETING OPERABLE UNITS AND FACILITIES STATUS

April 18, 2007

#### UP-1, CS-1 CW-1 OU Group

#### 200-UP-1

(M-15-17A, 11/30/10, Feasibility Study/Proposed Plan) Ecology

- Rebound Study:
  - Tc-99 and uranium concentrations are still below the interim RAOs of 9,000 pCi/L and 480 µg/L respectively (Attachments 6 and 7).
  - Uranium concentrations in well 299-W19-43 continue to fluctuate at about 380 μg/L.
  - Ecology update on the Explanation of Significant Difference (ESD) for the UP-1 interim ROD.
- RI/FS Work Plan:
  - Six of 12 new 200-UP-1 wells (UP1, UP2, UP3, UP4, UP5, and UP11) required by the RI/FS Work Plan have been installed. Planning for the remaining six wells is now scheduled for June FY2007.
- SAP Rewrite
  - Several of the wells within the SAP have gone dry and can no longer be sampled. A revision of the SAP is planned for the last quarter of FY07, however the project believes this money could be better spent on other activities.

#### 200-CS-1

 Risk assessment activities to support Draft B of the feasibility study and proposed plan continue. Consistent with the RL/FH/Ecology February meeting to present for discussion the path forward for the development of Draft B, a meeting to present/discuss screening of constituents on scientific basis as well as modeling input parameters will be scheduled soon.

200-CW-1 (no change) (M-015-38B, 5/31/09, Feasibility Study/Proposed Plan) Ecology

#### ZP-1, PW-1/3/6 OU Group

#### 200-ZP-1

(M-15-48B, 9/30/07, Feasibility Study/Proposed Plan) EPA

Remediation Treatment Status:

- Between October 1, 2006 and April 1, 2007 the 200-ZP-1 pump-and-treat system average pumping rate was approximately 261 gpm.
- Currently nine of the ten 200-ZP-1 extraction wells are on line pumping at approximately 250 gpm. The pump in extraction well #5 is scheduled to be replaced this week.
- Attachments 8 and 9 show the most recent Tc-99 concentrations in extraction wells 299-W15-765 and 299-W15-44, and nearby monitoring well 299-W15-763. The average Tc-99 concentration of the mixed extraction water entering the ZP-1 treatment building is approximately 40% of the MCL of 900 pCi/L.
- The two Purolite resin treatment skids arrived April 12 and have been hooked up to wells 299-W15-765 and 299-W15-44. These wells will be put on line shortly to start the treatability test. See photographs shown in **Attachments** 10 and 11.
- Trend data for carbon tetrachloride in well 299-W15-6 is presented in Attachment 12.
- Design work has started for hooking up wells 299-W11-45 and 299-W11-46 to the ETF transfer lines. Final revisions are currently being made to the test plan supporting this work.
- Status the Ecology visit to observe the above ground single walled extraction well lines.

#### RI/FS Status:

- FS Report:
  - Document is on schedule.
  - Completed the detailed analysis of alternatives except for cost estimating.
  - Comparative analyses of alternatives and baseline risk assessment are near complete. The internal draft report is scheduled to be issued for review the middle of May 2007.

#### • Tc-99 Investigation Status:

- T Tank Farm Investigations:
  - Drilling has started on the T-4 well (C5243, 299-W11-48). The well is currently at a depth of approximately 262 ft bgs as of 4/9/07. The depth to groundwater is approximately 242 ft bgs. The first groundwater sample was collected from 252-257 ft bgs on 4/6/07.
  - The DQO summary report (WMP-28389, External Review Draft) was submitted for external review from 2/16/07-3/28/07. Comments are being incorporated.
  - Attachments 13, 14, and 15 show the Tc-99 concentrations in wells in the vicinity of the T Tank Farm.
- Purolite Resin Treatability Testing:
  - Two treatment skids have arrived onsite and have been hooked up to wells 299-W15-44 and 299-W15-765.
  - · Treatability sampling will start soon.

 A slight change was made to the piping configuration in Figure B-1 of the treatability test plan (DOE/RL-2006-64, Rev. 0) where one additional particulate filter was put in line.

## 200-PW-1, 200-PW-3, & 200-PW-6 (M-15-45B, 9/30/07, Feasibility Study/Proposed Plan) EPA

- The PW-1/3/6 FS is progressing. Risk assessment, alternatives development, and cost estimating are well underway.
- EPA's comments on the PW-1/3/6 Remedial Investigation Report, Draft A, are being incorporated.
- TPA Change Package to transfer identified waste sites from the 200-PW-1/3/6 OUs to other OUs was approved on 4/12/07.
- Vista Engineering issued the Carbon Tetrachloride Dense Non-Aqueous Phase Liquid (DNAPL) Source Term Characterization Report Addendum (DOE/RL-2007-22, Rev. 0) on 4/4/07.
- Soil Vapor Extraction System (SVE):
  - The SVE system was turned back on April 2, 2007 at Z-9 Area.
  - The Carbon Tetrachloride Expedited Response Action Soil Vapor Extraction System Operating Plan for FY 2007, which was approved at the March 2007 UMM, was revised to add well 299-W15-32 and provided to DOE-RL and EPA for approval.
- The passive system remains operational.

Monthly monitoring results for March 2007 are presented in Attachment 16.

#### CW-2/4/5 & SC-1 OU Group

200-CW-2, CW-4, CW-5, & SC-1 (M-15-40D, 4/30/08, Feasibility Study/Proposed Plan) EPA

RL is considering a TPA change package for the 200-SC-1 OU RI/FS.

Discussion: Fluor's recommendation is that 200 SC-1 needs supplemental characterization, therefore making it a separate RI/FS will allow this M-15 milestone to be met as scheduled. The additional RI/FS will allow time for a comprehensive evaluation of the new characterization data to be gathered. It was noted that this recommendation needs further discussion.

#### TW-1/2 & PW-5 OU Group

200-TW-1, 200-TW-2 & 200-PW-5 (no change) (M-15-42D, 12/31/11, Feasibility Study/Proposed Plan for TW-1 & PW-5) EPA (M-15-42E, 12/31/11, Feasibility Study/Revised Recommended Remedy (ies) for TW-2) Ecology

• EPA comments on the Addendum to the Work Plan addressing the excavation-based

BC Cribs and Trenches Area waste sites treatability test were incorporated and the document was resubmitted.

#### PO-1, PW-2/4, MW-1 OU Group

## 200-PO-1 (M-13-10A, 9/30/07, RI/FS Work Plan) Ecology

DQQ

The DQO process continued for a 200-PO-1 OU investigation effort.

#### SAP

Work continued on a draft 200-PO-1 Characterization SAP to support the RI/FS Work Plan development. This SAP along with the existing Monitoring SAP (DOE/RL-2003-04 Rev.1) will be included in the Draft A Work Plan due to Ecology September 30, 2007.

WORK PLAN (no change)
 Work continued on drafting the 200-PO-1 Draft A Work Plan.
 Ecology is moving forward on the Site-wide permit renewal.

#### INTEGRATION

The 216-A-4 well being drilled by waste sites has reached groundwater and will be completed as a 200-PO-1 OU monitoring well.

Groundwater samples were collected from the screened interval (314.0 to 349.0 ft bgs) with the temporary pump intake set at 326.3 ft bgs (HEIS #s B1MC65 and B1MC66).

Following the removal of the temporary pump, the final depth to bottom was measured at 351.40 ft bgs, indicating that  $\sim 0.5$  ft of sediment remains in the bottom of the 3-ft sump. The final water level depth was measured at 314.18 ft bgs.

A permanent sampling pump was installed 4/11/07 with the pump intake at ~5 to 6 ft below the top of the screened interval (~319 to 320 ft bgs).

• Waste Control Plan, supplement to DOE/RL-2004-18, was submitted and approved (Attachment 20).

#### 200-PW-2 & 200-PW-4

### (M-15-43D, 12/31/10, Feasibility Study and Revised Recommended Remedy (ies)) Ecology

 At the February UMM Ecology stated that comments are forthcoming on the TSD closure plans and the FS as needed to support the TSD closures.

#### 200-MW-1

#### (M-15-44B, 12/31/08, Feasibility Study/Proposed Plan) EPA

- A SAP for field work at 216-A-2 Crib and 216-A-21 Crib was transmitted to EPA on 4/5/07.
- TPA Change Package to transfer 216-A-2 Crib from PW-3 OU to MW-1 OU was approved on 4/12/07.

#### **BP-5 OU Group**

#### 200-BP-5

(M-13-06B, 3/31/07, RI/FS Work Plan) EPA

(M-15-21A, 10/31/10, Feasibility Study/Proposed Plan) EPA

**"F" well (299-E33-50/C5195):** Drilling at F well was completed March 8, 2007 (See Figure 1, **Attachment 17**). The well was completed and developed March 29, 2007. Below are key lithology, sampling and reported analytical results from the investigation of this well.

- 1) The Pomona Basalt formation was encountered at 377.8' bgs.
- 2) The bottom of the Elephant Mountain Basalt Formation was encountered at 316' bgs.
- 3) Three sediment samples were collected at the following intervals: 318-320', 341-343.5' and 362.4'-364.4'.
- 4) Three groundwater samples were collected at the following intervals: 325', 346.2', and 377.8'.
- 5) Gross beta results were reported as follows: 0.700 pCi/ml at 325' bgs and 1.10 pCi/ml at 346.2' bgs.
- 6) The counting error for both samples was approximately as high as the reported value, 0.840 pCi/ml and 0.847 pCi/ml.
- 7) The well screen was placed from 316' to 331' bgs.

**Work Plan:** The work plan was delivered to EPA on March 29 completing the M-13-06B milestone.

#### HRR: Field work is on going.

The B/BX/BY WMA and surrounding waste sites HRR work is complete which includes 36 transects (see Figure 2, **Attachment 18**). Modeling and report writing continue and the internal draft report is scheduled by September 30, 2007.

**Groundwater Results**: Significant increases in Tc-99 concentrations have been reported along the southern portion of the B Tank Farm in well 299-E33-337 (see Figure 3, **Attachment 19**). The table below reports the Tc-99 concentrations over the past year.

Tc-99 concentrations in pCi/L

Well	Dec 2005	Feb 2006	May 2006	Aug 2006	Nov 2006	Feb 2007
E33-38	14,600	16,400	15,800	22,000	26,800	- T14. W.L.
E33-16	4310	4,210	5,510	11,800	14,100	
E33-18	5,480	6,640	6,000	14,000	13.300	14,400
E33-26	5,260	6,170	6,990		7,630	
E33-337	171	199	66.30	419	1,270	3,230
E33-34	9,530		11,000		8,500	

#### UR-1, MG-1/2, ECO, BP-1, LW-1/2 OU Group

#### 200-UR-1

- Rev. 0-Reissue of the Sampling and Analysis Plan approved by DOE on March 8,
   2007 and approval by the Department of Ecology is in progress. Conditional approval to proceed for field sampling activities was given by e-mail on December 13, 2006.
- Analytical sampling (auger drilling) field work was completed March 28, 2007.

## 200-MG-1/200-MG-2 Model Group 1 Sites (M-15-49A, 12/31/08, MG-1 Feasibility Study/Recommended Remedy) Ecology (M-15-49B, 12/31/08, MG-2 Feasibility Study/Proposed Plan) EPA

Planning has been initiated and baseline preparation is in progress.

#### **Ecological Risk Assessment**

- The Phase III West Lake sampling activities that were planned for March have been delayed to April, 2007 because the brine fly population has come later than expected.
- The sampling initiated in the BC Controlled Area to verify the presence or absence of chemical constituents in March 2005 was incomplete due to a missed QC sample. Therefore, a second set of samples was collected to obtain a complete data set. To minimize costs, and eliminate additional mobilization efforts, these samples were collected in conjunction with the 200-UR-1 OU soil characterization effort. Sampling was completed on 3/28/07.
- A site tour was held with RL, EPA, and FH on 4/6/07 of the two offsite reference sites sampled in Phase III.
- A briefing on the status of the Ecological Risk Assessment was given to the Hanford Advisory Board River and Plateau Committee on 4/11/07.
- Plans have been set for a meeting with the Hanford Natural Resource Trustee Council
  and other participants in the Ecological Risk Assessment for 5/15/07 to review the
  data collected in the Phase III field characterization.

#### 200-BP-1

 Prototype Hanford Barrier Monitoring and Inspection Report anticipated to be submitted to RL on 9/28/07.

#### 200-LW-1/200-LW-2

#### (M-15-46B, 12/31/11, Feasibility Study/Recommended Remedy) Ecology

- Submittal of Draft A of the FS and PP is due 12/31/2011, per TPA Change Number M-15-06-05.
- Re-baseline planning for additional characterization is in progress.

#### BC-1, IS-1, SW-1/2 OU Group

#### 200-BC-1

#### (M-15-51, 4/30/10, Feasibility Study/Proposed Plan) EPA

- Draft A DQO summary report and SAP addressing correlation of HRR characterization with soil characterization data were submitted to RL 4/30/07. RL will formally transmit the SAP to EPA.
- Draft A SAP for Phase 1 of the excavation-based treatability test is expected to be transmitted to RL ~4/23.

#### 200-IS-1

#### (M-13-27, 6/30/07, RI/FS Work Plan) Ecology

- RL and Ecology provided concurrence signatures on the DQO.
- The 200-IS-1 WP is on schedule delivery to Ecology by June 30, 2007.

#### 200-SW-1/2

#### (M-13-28, 9/30/07, RI/FS Work Plan) Ecology

Alignment meetings have been held with DOE-RL, Ecology and FH to discuss scope, schedule and content of the RI/FS Work Plan (Draft B) deliverable. A draft agreement involving a phased characterization-strategy has been shared with DOE-RL and Ecology; near term approval is anticipated.

Discussion: FH has an approved SAP that should be amended to do non-intrusive sampling.

#### D&D OUs

#### 200-CW-3 EPA

- Completed characterization sampling and analysis of sites 216-N-2, -3, -5, and -7.
- Plan to begin excavation of site -5 in late April.
- Sample results of sites -2 and -3 indicate that excavation may not be required.
- Site -7 results indicate that excavation is required. Excavation currently scheduled for early FY08, however, evaluating opportunities to accelerate schedule.

#### 200-UW-1 Ecology

- 200-W-42 VCP / UPR-200-W-163 A Time Critical Removal Action (TCRA) excavation completed and Phase I portion backfilled on 9/30/06. Phase II backfill pending resolution of >15' deep contamination. A BCR is being prepared which addresses RL priorities considering available funding. Excavation area monitoring (contamination and air) continues.
- ROD is being updated and reviewed to reflect recent path forward. Draft completed Feb. 28 and has been reviewed. Currently, comments are being dispositioned. Schedule is to issue in June 2007. Delays in finalizing the ROD are primarily due to difficulties in reaching agreement on soil clean-up Remedial Action Goals (RAGs) and depth of excavation beyond 15 feet.
- Responsiveness summaries to public comments on TPA Change Request for reclassifying Crib 216-U-12 to a RCRA Past Practice (RPP) unit were sent for final review week of 1/15/07. Approval will be requested at the April 19<sup>th</sup> IAMIT meeting.
- TPA Change Request to change 216-U-15 from a CPP to a RPP has been reviewed and updated. Package will be transmitted with U-12 package for final review. No public review is anticipated for this portion of the change request. Approval will be requested at the April 19<sup>th</sup> IAMIT meeting
- RAGs for 200-UW-1 need to be finalized. A successful briefing was held with RL's Deputy Manager on April 10<sup>th</sup>. Several peer reviews have been completed. It is generally accepted that refined cleanup levels resulting from modeling efforts will not be available to meet the schedule for completing the ROD. A workshop to discuss the RAGs is planned in early May with participants from DOE, Ecology, EPA, and the USGS. Due to contamination >15' depth at 200-W-42 excavation establishing acceptable goals is a high priority. Currently, FH is preparing a "Due Diligence" letter to be transmitted to the regulators the week of 4/23/07 describing how the approach being proposed satisfies the regulatory requirements.
- Challenges to the Area C cultural review are being made by Yakama Tribes and Washington State Department of Archaeology & Historic Preservation (DAHP). Pathforward is under RL review.
- Phase II of the 241-U-361 Settling Tank (sampling tank sludge) has begun. Approval
  of the SAP and Waste Control Plan was received from Ecology on 4/2/07.

#### **FACILITIES STATUS**

- 221-U Facility/Canyon Disposition Initiative (CDI)
  - Continuing development of remedial design engineering alternatives studies:
    - Grout study (June 2007)
    - Cell 30 vessel contents removal study (June 2007)
    - Railroad tunnel reactivation study (June 2007).
  - Draft A Remedial Design/Remedial Action Work Plan for the 221-U Facility and an accompanying draft TPA change form were transmitted for EPA and Ecology review on 12/21/06, and comments were received in March 2007. RL is requesting a 60-day extension on the comment resolution period to allow adequate time to address the extensive comments at the project manager level.

- Continuing development of canyon waste acceptance study (June 2007).
- Conducted RL, EPA, and Ecology interviews in support of the PUREX canyon DQO.

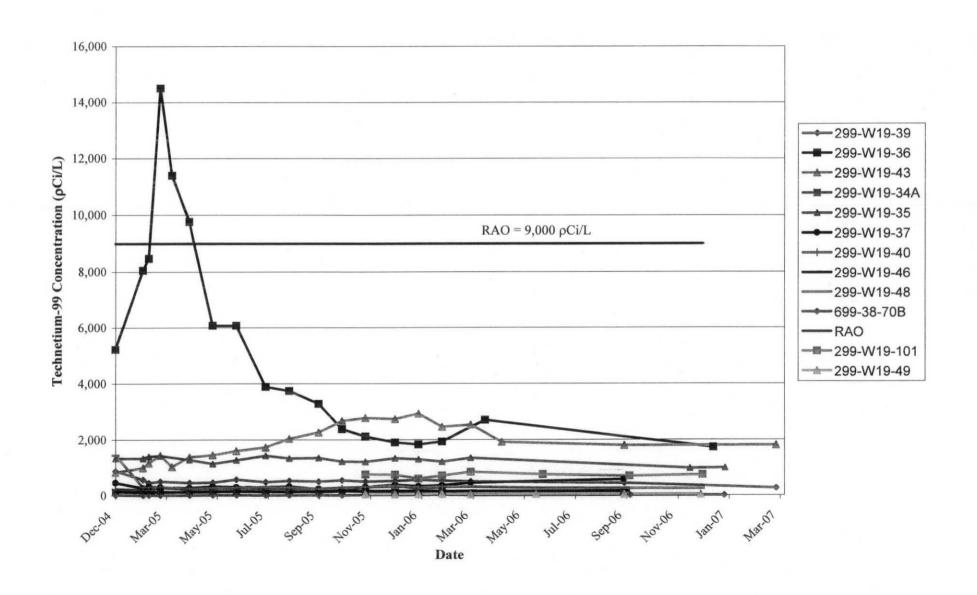
#### • Facility Binning (no change)

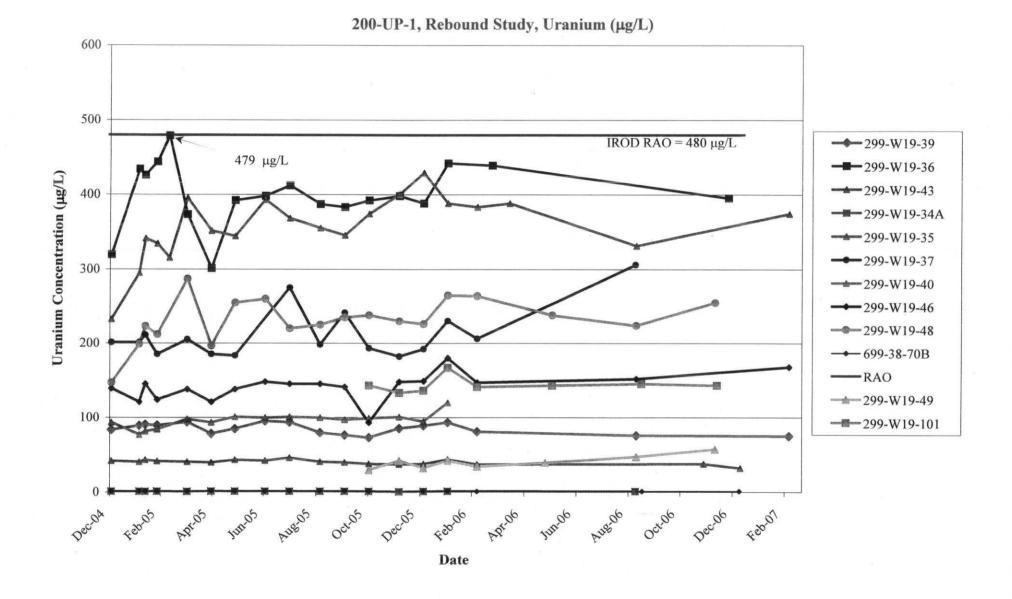
Draft AIP is being updated to include proposed discussions on U Plant CDI.

#### Miscellaneous Facility D&D

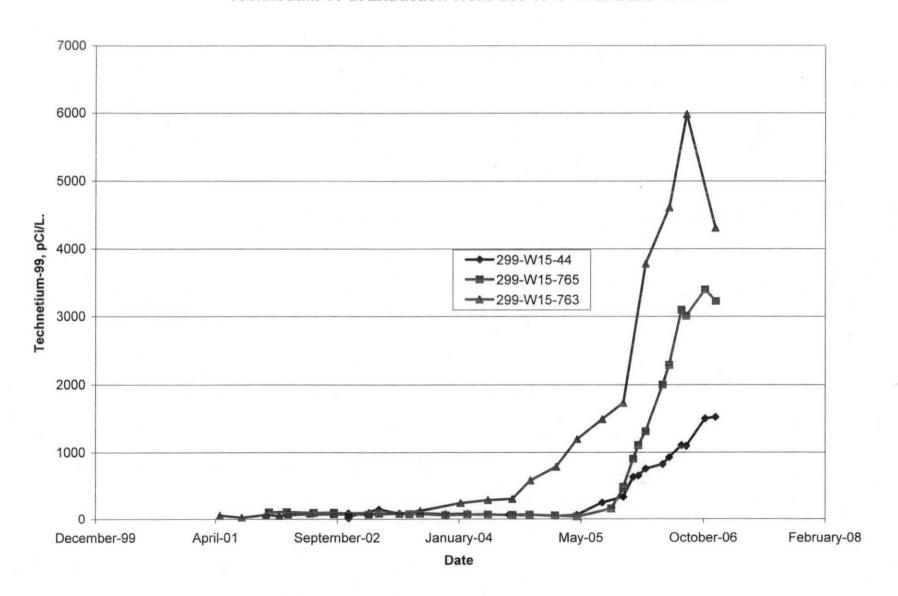
Completed demolition of eleventh Building (2715M) in FY07. This completes currently scheduled FY07 and FY08 miscellaneous facility demolition.

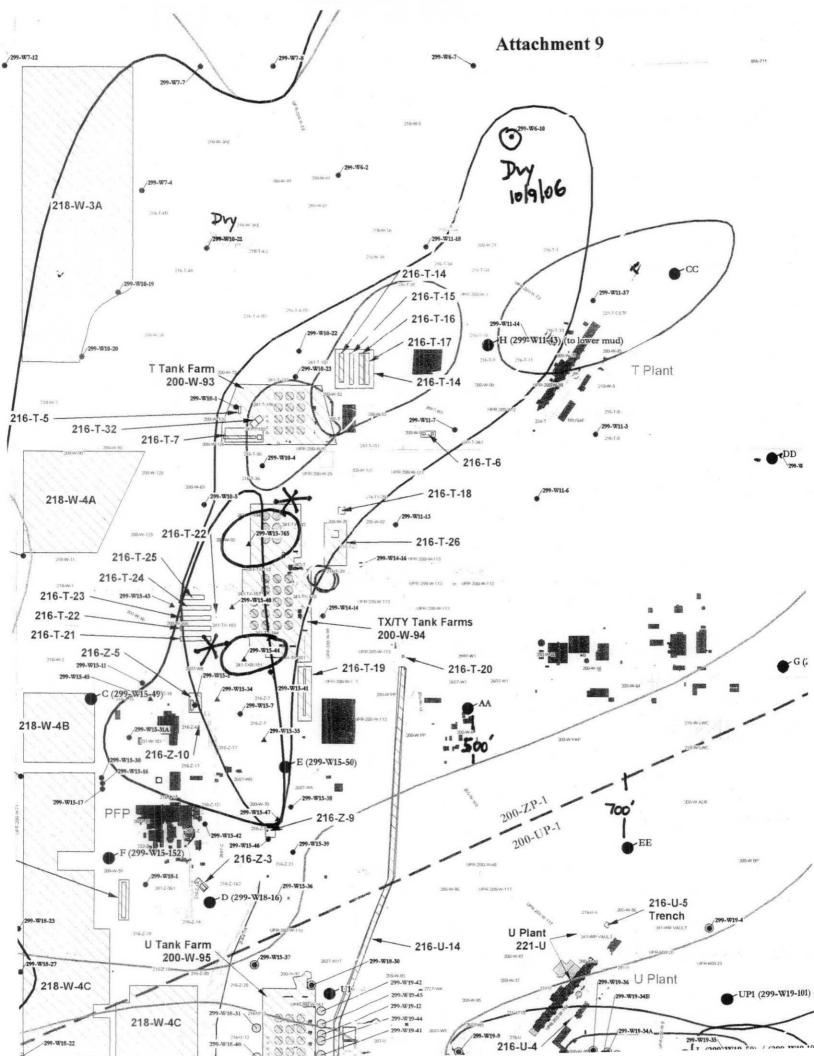
200-UP-1, Rebound Study, Technetium-99 (pCi/L)

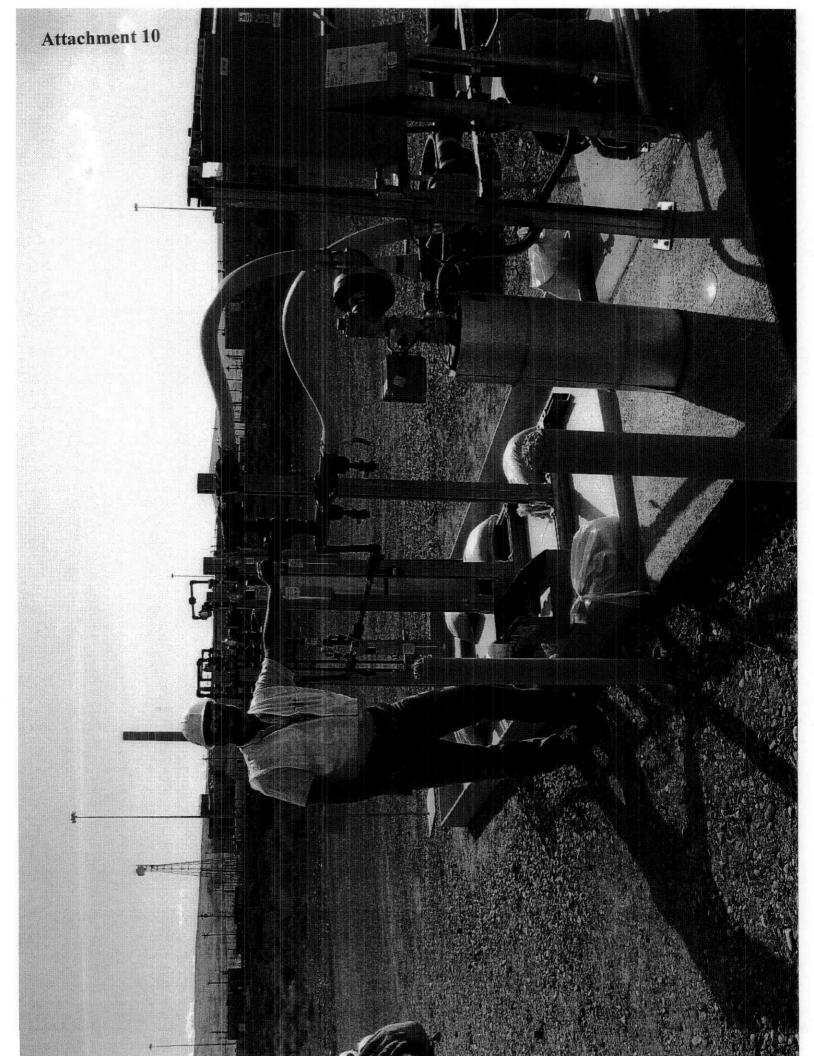




#### Technetium-99 at Extraction Wells 299-W15-44 and 299-W15-765

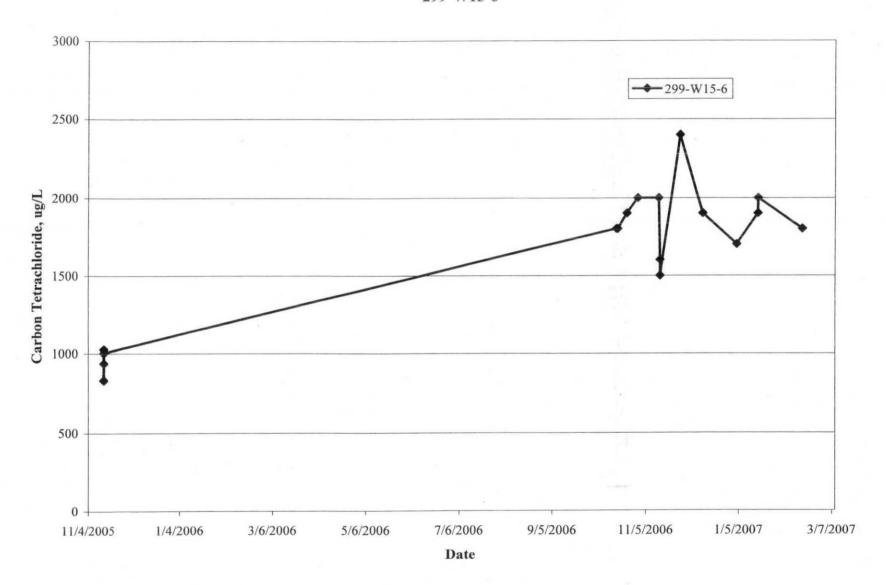




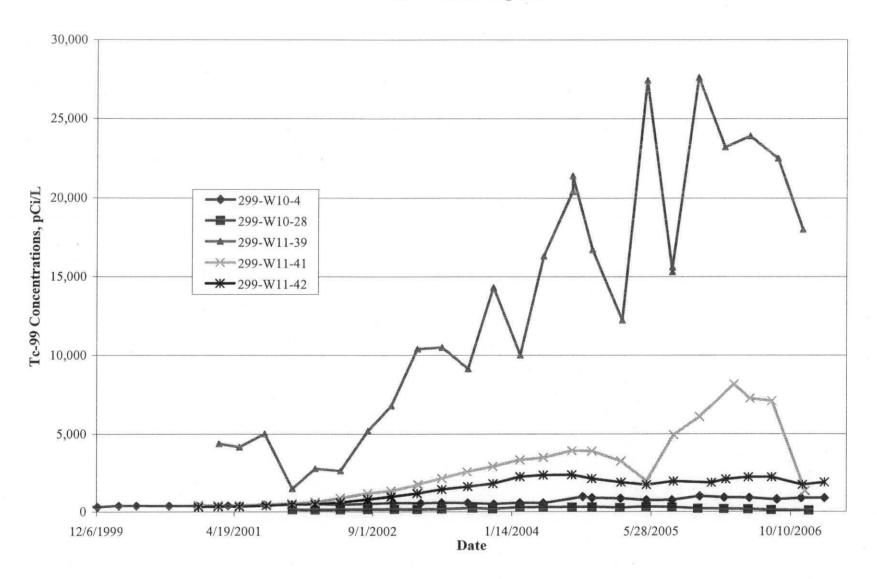




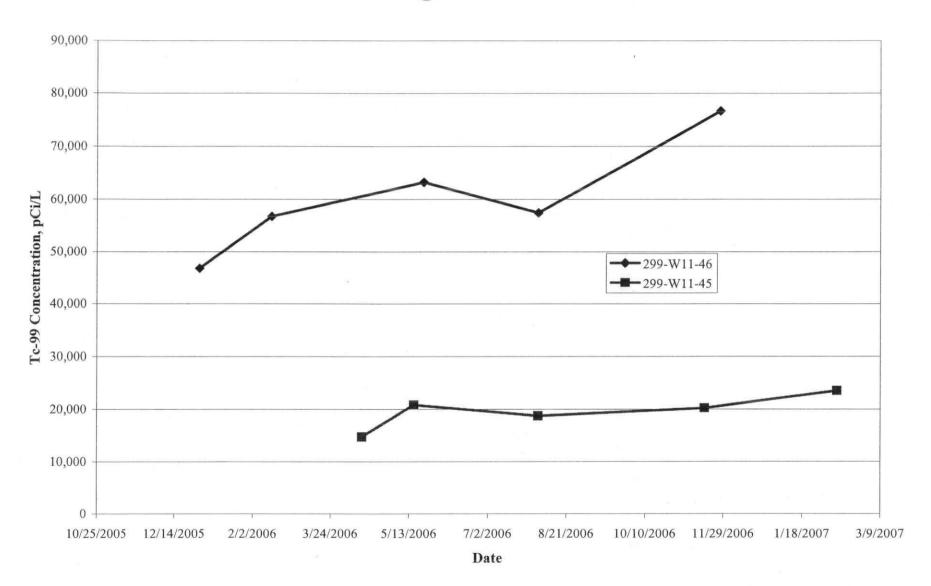
299-W15-6

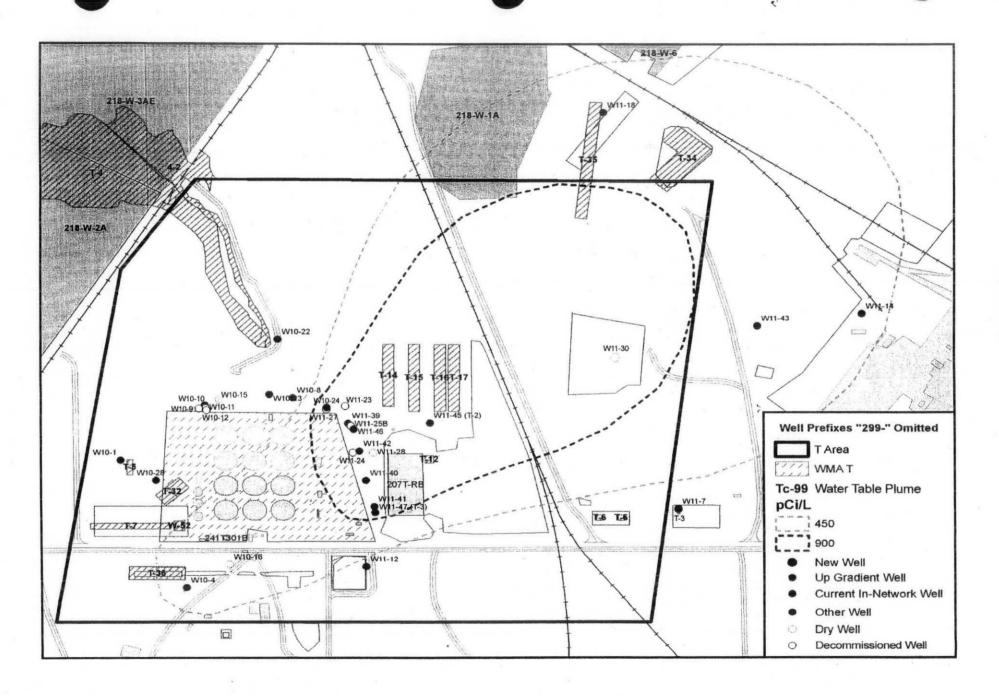


#### 241-T Monitoring Wells



Tc-99 @ 241-T Tank Farms





#### Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites FY 2003 - FY 2007

200-PW-1		July 2002 (Z-9) or Oct (Z-1A) -	ober 2003	April 2004 (Z-1A	) -	October 2004		July 2005 -		July 2006 -	
Location	Site	March 2004 Maximum Rebound	monther	September 200 Maximum Rebound		June 2005 Maximum Rebound	months	June 2006 Maximum Rebound	monthst	February 2001 Maximum Rebound	
Location (Well or Probe)	Site	Carbon Tetrachloride	months*	Carbon Tetrachloride	of	Carbon Tetrachloride	months*	Carbon Tetrachloride	months*	Carbon Tetrachloride	
/feet bgs		(ppmv)	rebound		rebound	(ppmv)	rebound	(ppmv)	rebound	(ppmv)	rebo
-03/ 5 ft	Z-18	(ppiiiv)	Tobound	(ppility)	resound	(ppinv)	repound	(ppinty)	Topodiid	(ppint)	1000
	Z-1A										-
	Z-1A		-								-
05/ 5 ft	Z-9										_
05-01/5 ft	Z-9										-
											-
06/ 5 ft	Z-9										-
05/ 5 ft	Z-1A										-
09/5ft	Z-1A										-
02/5 ft	Z-9										
11/5ft	Z-9		Lance a con-								
12/5ft	Z-9										
14/5ft	Z-9										
T-13A/ 9 ft	Z-1A										
T-16/ 10 ft	Z-9										
T-17/ 10 ft	Z-9	9.0	21	9.9	27	11.4	5	2.5	12	1.6	
T-18/ 15 ft	Z-9	2.4		2.5		3.1		0	12		-
T-4A/ 25 ft	Z-1A	2.7	- 41	2.0		0.1	-	- 0	16		+
T-4A/ 25 π T-27/ 15 ft	Z-1A Z-9		-		-					-	1
			-		- 0		- 0		0	0	
T-4E/ 25 ft	Z-1A			2.4	0	2.4		2.4		0	
T-16/ 25 ft	Z-9	2.6	21	3.6	27	4.4	5	1.6	12	1.0	
T-31/ 25 ft	Z-12										
T-32/ 25 ft	Z-1A	5.9			La Janes	8.6		6.4		6.0	
T-30/ 28 ft	Z-18	C				1.6		1.2		0	_
T-13A/ 30 ft	Z-1A	1.8	6	1.9	0	8.3		4.1		5.8	
T-7A/ 32 ft	Z-1A	9.5	6	1.9	0	4.4		3.8	0	3.8	3
T-27/ 33 ft	Z-9	2.7		2.7	27	8.4		1.8			
T-1A/ 35 ft	Z-12	18.3		18.0	0	14.0		17.2		13.4	1
T-18/ 35 ft	Z-9	10.0	T-	.0.0	-	14.0	-	17.2	-	0	
T-28/ 40 ft	Z-9				-	5.4	0			5.5	
T-33/ 40 ft	Z-18		-			3.9			-	1.6	
			-		0			20	0		
T-34/ 40 ft	Z-18		-	1.8	0	3.0		2.0	0	1.3	-
T-21A/ 45 ft	Z-9		-			7.9	0		-		1
T-30/ 48 ft	Z-18									4.2	4
5-220ST/ 52 ft	Z-9										2
T-9A/ 60 ft	Z-9	35.9	21	35.9	27	32.4		29.2	12	16.2	2
T-28/ 60 ft	Z-9					68.3					2
T-C3872 / 63 ft	Z-1A					15.5	9-	9.9	6	12.2	2
T-16/65 ft	Z-9			4.2	27	6.7		5.6			
T-21A/ 65 ft	Z-9	150	21	150		170		167		153	3
T-1A/ 68 ft	Z-12	100	21	100	21	13.7		107	12	13.2	
			-			10.7	3		-	10.2	2
T-30/ 68 ft	Z-18		-				-		-		-
T-13A/ 70 ft	Z-1A										-
PT-24/ 70 ft	Z-9			9.1	27			5.2	12		
PT-32/70 ft	Z-1A					5.5	9			4.3	3
15-219SST/ 70 ft	Z-9			5.7	22						
T-4A/ 75 ft	Z-1A										
PT-18/ 75 ft	Z-9			8.3	27		_	4.3	12		1
PT-31/ 76 ft	Z-12			0.0				1.0	12		+
PT-33/ 80 ft	Z-18		-		_		-		-		+
	Z-10	85.8	04	05.0	07	05.0	-		40	3/	-
15-82/ 83 ft				85.8		95.8		8.1		3.9	
T-21A/ 86 ft	Z-9	244	21	244	27	209	5	223	12	194	4
T-34/ 86 ft	Z-18										-
15-95U/ 86 ft	Z-9										
15-218SST/ 86 ft											
T-28/ 87 ft	Z-9	258	21	258	27	246	5	245	12	216	6
T-4B/ 90 ft	Z-1A										
T-1A/ 91 ft	Z-12										
T-4A/ 91 ft	Z-1A										
T-9A/ 91 ft	Z-9										1
15-85/ 91 ft	Z-9		<b>T</b>								1
18-252SST/ 100							_		1		+
18-152/ 101 ft	Z-12	12.4	6			16.0	9	16.2	6	16.3	3
15-8U/ 103 ft	Z-12	12.	- 0			10.0	1	10.4		14.1	
PT-4E/ 103 ft	Z-1A		+				+	10.4	14	14.1	+
18-167/ 106 ft			0		-	100	0	247	0		0
	Z-1A		6		-	196		174	6	3.0	
T-4F/ 109 ft	Z-1A		-			11.9		-		2.9	
18-165/ 109 ft	Z-1A					35.2		394		2.5	
15-217/ 114 ft	Z-9	458	21	467		374	5	19.7		16.5	0
T-24/ 118 ft	Z-9		-	15.3				23.9			
15-220SST/ 118				26.0	27			25.2	12		
18-158L/ 120 ft											
15-219SST/ 130	Z-9			0	22						
18-249/ 130 ft	Z-18	41.0	6			64.9	9	24.1	1 6	19.7	7
18-248/ 131 ft	Z-1A					249		67.0		131	
5-95L/ 144 ft	Z-9	40.3		40.3	27	26.7		25.7		18.0	
15-219SST/ 155		40.0	1	9.5		20,1	1	20.7	1.2	10.0	1
5-220L/ 163 ft			-	7.5			+	13.2	12		+
			+				+				+
5-219L/ 175 ft	Z-9	-		23.0			-	12.2			
5-9L/ 176 ft	Z-9	13.		13.1		2,1		5.4		7.9	9
5-84L/ 180 ft	Z-9	25.9	21	25.9	27	23.0	5	14.0	12		1
5-6L/ 182 ft	Z-9										-
5-220SST/ 185											
8-7/ 197 ft	Z-1A										
8-12/ 198 ft	Z-18										
	Z-1A										
18-6L/ 208 ft	Z-9							4.7	7 12	5.1	7
			-		-		+	<u> </u>	-	-	-
8-6L/ 208 ft 5-46/ 217 ft											
		* - based on location (7)	1A/18/12	r Z-9) of monitoring point	specific ry	pints may be beyond SVF	zone of in	fluence during particular o	perating o	onfigurations	+
		* - based on location (Z - Z-18 and Z-12 wells		r Z-9) of monitoring point; 96 - Apr 98	specific po	pints may be beyond SVE	zone of in	fluence during particular o	operating c	onfigurations	Ŧ

#### Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites January 2006 - March 2007

200-PW-1	T															
200-1	-	01/26/2006	02/23/2006	03/28/2006	04/28/2006	05/26/2006	06/29/2006	07/26/2006	08/30/2006	09/26/2006	10/25/2006	11/30/2006	12/19/2006	01/31/2007	02/27/2007	03/21/2007
Location	Site	01/20/2000	02/20/2000	00/20/2000	04/20/2000	03/20/2000	00/23/2000	0112012000	00/00/2000	03/20/2000	10/20/2000	1170072000	12/10/2000	01/01/2007	OLIZIILOO!	OG/E//EGG/
(Well or Probe)	Oite	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4
/feet bgs		(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)
CPT-17/ 10 ft	Z-9	1.3			2.0	2.2			(FF)	(PP.	1.2	1.2	1.2			
CPT-18/ 15 ft	Z-9	0														
CPT-27/ 15 ft	Z-9										0	0	0	0	0	(
CPT-4E/ 25 ft	Z-1A				2.4	1.7	0	0	0	0						
CPT-16/ 25 ft	Z-9	1.1	1.1	1.1	1.0	0					0	1.0	0	0	1.0	(
CPT-32/ 25 ft	Z-1A	4.0	4.8	6.4				0	0	0	0	1.2	2.1	3.4	6.0	5.7
CPT-30/ 28 ft	Z-1A	0	0	0				0	0	0						
CPT-13A/ 30 ft	Z-1A	3.6	3.5	3.3	3.6	3.8	3.3	2.4	2.5	2.4	3.3	2.9	5.8	1.6	5.0	2.2
CPT-7A/ 32 ft	Z-1A	2.8	3.3	3.8		2.4	1.8	2.0	1.9	1.2	1.9	2.5	2.6	3.2	3.4	3.8
CPT-27/ 33 ft	Z-9	0	0	0	0	0	0									
CPT-1A/ 35 ft	Z-12	7.7	6.0	7.4	6.2	8.9	13.2	11.0	13.4	10.2	10.0	4.6	5.1	4.4	7.3	2.8
CPT-18/ 35 ft	Z-9										0	0	0	0	0	C
CPT-28/ 40 ft	Z-9							5.5	4.3	4.8						
CPT-33/ 40 ft	Z-18							0	1.3	1.6						
CPT-34/ 40 ft	Z-18				1.3	1.7	1.2	0	1.3	1.3						
CPT-21A/ 45 ft	Z-9															
CPT-30/ 48 ft	Z-9										0		3.1	2.9		
CPT-9A/ 50 ft	Z-9	48.1	50.4	46.1	46.9	49.0	39.1	32.8	40.7	43.3	30.6	42.6	42.0		39.5	27.4
CPT-9A/ 60 ft	Z-9	17.4	11.4	16.0	17.3	24.4	13.3	12.8	9.8	15.7	14.2	16.2	13.1	13.2	7.2	10.7
CPT-28/ 60 ft	Z-9															
CPT-C3872 / 63 ft	Z-1A	5.1	6.3	9.9				2.1	2.2	2.4	3.5		6.1	7.8		10.1
CPT-9A/ 64 ft	Z-9	33.4	36.2	36.6	33.1	36.4	33.1	33.8	33.8	33.9	28.1	32.3	28.9	16.7	29.9	26.1
CPT-16/ 65 ft	Z-9	B			5.3	5.6	4.6					G 11				
CPT-21A/ 65 ft	Z-9	139	146	145	139	160	137	153	132	137	123	120	123	127	138	101
CPT-1A/ 68 ft	Z-12							13.2	12.5	5.6						
CPT-24/ 70 ft	Z-9				4.4	5.2	4.3									
CPT-32/ 70 ft	Z-1A							4.2	4.3	3.5						
W15-219SST/ 70 ft	Z-9															
CPT-18/ 75 ft	Z-9				3.4	3.7	4.3									
W15-82/ 83 ft	Z-9	(m)	(m)	(m)	2.2	6.8	0				0		0	7,000,000		0
CPT-21A/ 86 ft	Z-9	186	194	201	192	204	165	179	171	194	159	169	164	189		119
CPT-28/ 87 ft	Z-9	213	226	217	217	223	174	180	185	216	181	202	196			119
W18-152/ 101 ft	Z-12	15.4	15.2	16.2				10.8	12.5	13.3	13.0	14.4	13.8	15.1	16.3	13.1
W15-8U/ 103 ft	Z-9	3.1	4.5	1.3	1.5	2.8	5.5				2.4	6.1	1.2			1.7
W18-167/ 106 ft	Z-1A	(m)	(m)	(m)				0	0	0	0	0	0	3.0	1.1	0
CPT-4F/ 109 ft	Z-1A	404	400	404				1.2	2.9		0	0	0	2.5	2.2	0
W18-165/ 109 ft	Z-1A	161	160	164	4.0	0.0	0	(q)	0	U	0		0		The second secon	0
W15-217/ 114 ft	Z-9	11.5	19.7	12.1	1.0 22.9	8.6 23.9	16.0				U	U	U	7.0	10.3	-
CPT-24/ 118 ft	Z-9				17.9	23.9	21.5									
W15-220SST/ 118 ft	Z-9 Z-18	12.4	17.1	24.1	17.9	22.0	21.0	4.6	19.4	18.1	16.8	18.4	8.8	19.7	16.1	16.0
W18-249/ 130 ft W15-219SST/ 130 ft	Z-18 Z-9	12.4	17.1	24.1				4.0	19.4	10.1	10.0	10.4	0.0	15.7	10.1	10.0
W15-219551/130 π W18-248/131 ft	Z-1A	(m)	(m)	(m)				(m)	27.2	43.0	42.1	45.3	30.7	52.7	131	4.7
W15-95L/ 144 ft	Z-1A	(m) 19.9	22.6	(m) 20.6	17.8	17.8	25.7	-(11)	21.2	40.0	10.0	16.2	15.3	16.9		0
W15-95L/ 144 ft W15-219SST/ 155 ft	Z-9	19.9	22.0	20.0	17.0	17.0	20.1				10.0	10.2	10.0	10.5	10.0	
W15-220L/ 163 ft	Z-9				2.4	9.3	7.3									
W15-219L/ 175 ft	Z-9				4.5	12.2	11.7									
W15-9L/ 176 ft	Z-9	4.0	5.4	3.5	1.5	2.4	0				4.7	2.3	2.2	3.5	7.9	4.7
W15-84L/ 180 ft	Z-9	4.0	0.4	0.0	4.2	14.0	4.1									
W15-46/ 217 ft	Z-9	4.7	(p)	2.1	0	2.6	0				0	0	0	4.0	5.7	0
			sample; well													
			pull represent													
			sample; well		physical loggi	na										
	-	11/2	7-1	3	35											

# Attachment 16, Figure 3

## Carbon Tetrachloride Concentrations Monitored at 200-PW-1 Passive Soil Vapor Extraction Wells January 2006 - March 2007

200-PW-1															
	1/27/2006	2/28/2006	3/27/2006	4/28/2006	5/26/2006	6/29/2006	7/26/2006	8/29/2006	9/26/2006	10/26/2006	11/28/2006	12/20/2006	1/30/2007	2/28/2007	3/21/2007
Location							T. C.								
(Well or Probe)	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4	CCI4
/feet bgs	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)	(ppmv)
W18-6L/ 208 ft	(b)	(b)	(b)	(b)	(b)	(b)	(b)	—(b)	15.8	3.7	1.4	0	4.8	4.9	8.1
W18-7/ 197 ft	15.8	16.2	15.3		20.3	5.9	11.0	15.3	0	5.6	6.0	2.1	7.8	14.1	11.8
W18-10L/ 183 ft	12.1	13.0	3.9	14.1	11.4	11.2	10.0	12.7	11.7	0	0	2.0	12.6	7.0	13.8
W18-11L/ 199 ft	7.6	9.0	0	5.4	7.2	1.8	3.0	8.4	1.3	0	0	0	4.5	3.4	3.2
W18-12/ 198 ft	4.9	9.4	1.3	0	2.4	0	0	4.8	0	0	0	0	1.3	0	0
W18-246L/ 170 ft	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	3.7	1.7	0	0	2.2	5.3	4.1
W18-247L/ 167 ft	5.1	7.6	0	3.0	1.8	1.3	0	5.7	1.0	0	0	0	1.4	0	5.1
W18-252L/ 175 ft	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	2.1	4.5
	(b) disconnec	cted for use b	v Vista Engin	eering for cro	ss-well seisn	nic investigati	on								

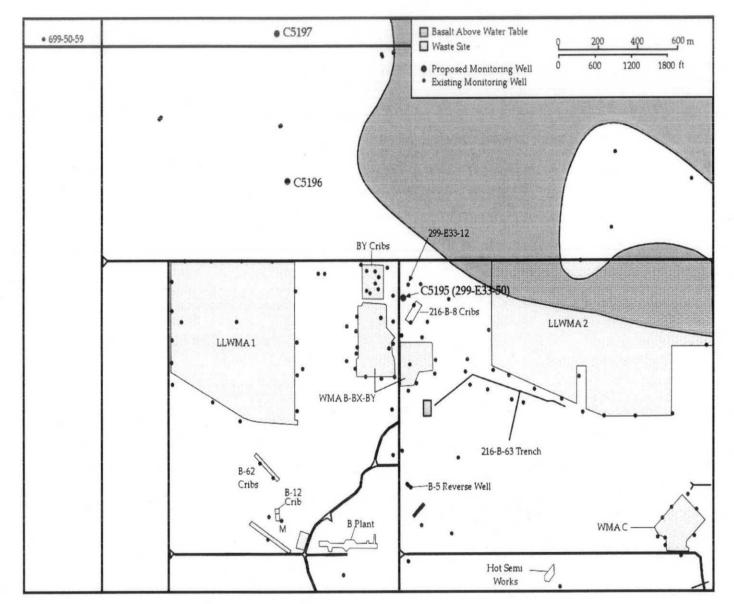


Figure 1. Locations of Proposed Wells Associated with 200-BP-5 Operable Unit.

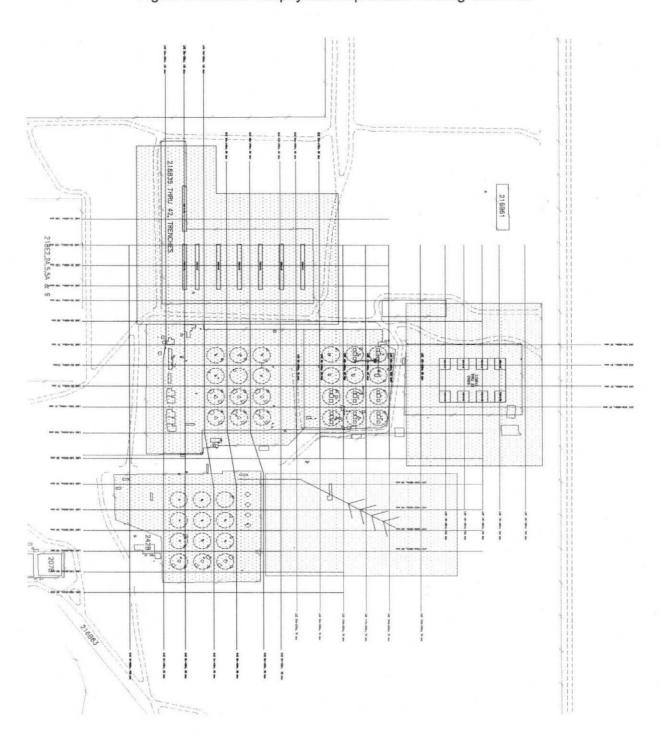
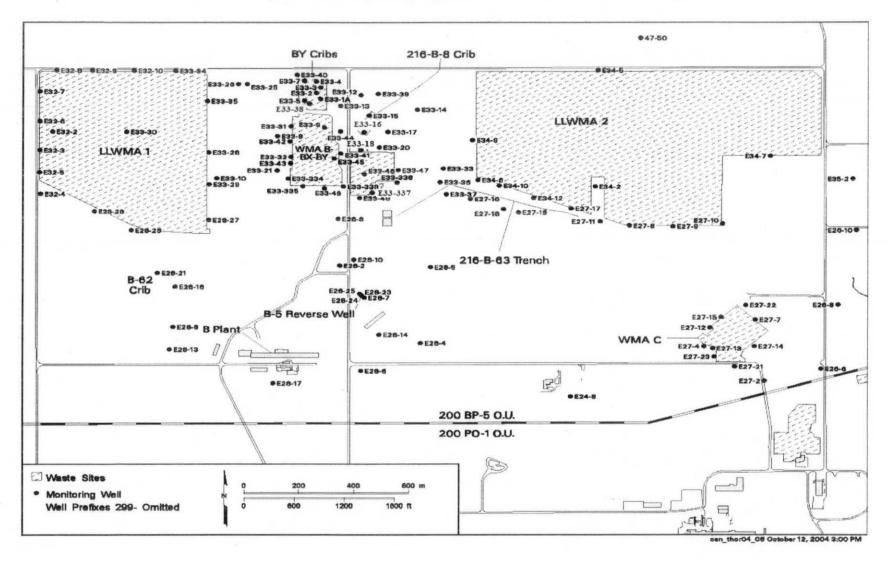


Figure 2 Surface Geophysical Exploration Investigation Area

Figure 3 Well reporting significant increases in Tc-99 in August.



Supplement to: DOE/RL-2004-18 Waste Control Plan for the 200-PO-1 Operable Unit

#### Attachment 3B 200-PO-1 Operable Unit Groundwater Well Decommissioning List

(This list will be updated as wells are identified for decommissioning, and will be provided at the 200 Areas Unit Managers' Meeting, and included in the UMM minutes)

- Listed Wells have approved decommissioning profiles/plans and are scheduled for decommissioning.
- Shading indicates wells added in this revision.

FY 2004	FY 2005
2-E17-3	299-E17-2
2-E25-30	299-E17-4
2-E25-30P	299-E17-5
2-F25-30Q	299-F17-6
6-11-29	299-E17-7
6-17-26B	299-E17-8
6-17-26BP	299-E17-10
6-17-26BQ	299-E17-11
6-17-26BR	299-E19-1
6-18-27D	299-E24-1
6-18-28	299-E24-2
6-19-26B	299-E24-9
6-19-26BP	299-E24-10
6-19-26BQ	299-E24-11
6-21-30B	299-E24-12
6-25-31	299-E26-3
6-25-33B	
6-25-33BP	FY 2005b
6-25-33BQ	699-36-46P
6-26-35D	699-36-46Q
6-26-35DP	699-36-46R
6-26-35DQ	699-36-46S
6-35-28	
6-42-41	FY2007
6-43-43	299-E23-2O
	299-E23-2P
	299-E23-2Q

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